

We claim:

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B2 1. An aqueous synfuel composition for use as an additive to combustible materials to facilitate complete combustion, said aqueous composition comprising 1.0% weight of polyvinyl alcohol, 10.0 to 35% by weight of a hydrocarbon wax and the balance of water, wherein all weight percentages are based on the total weight of the composition.

2. An aqueous synfuel composition as claimed in claim 1 which is in the form of an emulsion.

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B3 3. An aqueous synfuel composition as claimed in claim 1 wherein the hydrocarbon wax is selected from the group consisting of paraffin wax, slack wax, microcrystalline wax, olefinic wax-like materials and mixtures thereof.

4. An aqueous synfuel composition as claimed in claim 1 which comprises 2 to 5% by weight of polyvinyl alcohol, 15 to 30% weight of a hydrocarbon wax, 0 to 0.5% of a biocide and the balance of water.

5. An aqueous synfuel composition as claimed in claim 4 which comprises 2 to 4.5% by weight of polyvinyl alcohol, 16 to 26% by weight of a hydrocarbon wax, 0 to 0.10% by weight of a biocide and the balance of water.

6. An aqueous composition as claimed in claim 5 which further comprises 1.0% to 10.0% by weight of one or more filler materials, based on the total weight of the composition.

7. The method of assisting complete combustion of a material, said method comprising the step of applying to the material, a film of aqueous composition which comprises 1.0 to 10.0% by weight of polyvinyl alcohol, 10.0 to 35.0% by weight of a hydrocarbon wax, and the balance of water, wherein all weight percentages are based on the total weight of the composition.

8. A method as claimed in claim 7 wherein said composition is in the form of an emulsion.

9. A method as claimed in claim 7 wherein said composition also includes 1.0 to 10.0 % by weight of a filler material, based on the total weight of the composition.

10. A method as claimed in claim 7 wherein said composition comprises 2 to 4.5% by weight of polyvinyl alcohol, 16 to 26% by weight of a hydrocarbon wax, 0 to 0.505 by weight of a biocide, and the balance of water.

11. A method as claimed in claim 7 wherein the composition is applied by means of spraying on the material

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12. A method as claimed in claim 7 wherein the material is coal.

Sub B5 13. A method as claimed in claim 7 wherein said method complies with the Federal Air Quality Regulations.

14. The aqueous synfuel composition as in claim 1 and including a percentage of polyvinyl acetate in said composition.

15. The aqueous synfuel composition of claim 14 wherein said percentage of polyvinyl acetate is 10%.

16. The aqueous synfuel composition of claim 1 and including raw coal added to said composition.

17. The composition of claim 16 and including polyvinyl acetate.

18. The composition of claim 17 wherein the percentage of polyvinyl acetate is 10%.

19. The composition of claim 16 wherein the range of polyvinyl acetate is from 0% to 20%.

20. The composition of claim 16 wherein said coal is high density coal.

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